



UNITED STATES PATENT AND TRADEMARK OFFICE

SB
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,644	10/16/2001	Jason Lango	5693P113	7020
48102	7590	07/07/2005	EXAMINER	
NETWORK APPLIANCE/BLAKELY			AILES, BENJAMIN A	
12400 WILSHIRE BLVD			ART UNIT	PAPER NUMBER
SEVENTH FLOOR				
LOS ANGELES, CA 90025-1030			2142	

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/981,644	LANGO ET AL.
	Examiner	Art Unit
	Benjamin A. Ailes	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 April 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 and 14-36 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6 and 14-36 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 4/6/05 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/6/05, 4/22/05.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. This action is in response to the "REPLY TO OFFICE ACTION" received on 6 April 2005.
2. This application has been reassigned to a new examiner. Please see the conclusion section for the new examiner's contact information.
3. Claims 1-6 and 14-36 remain pending.

Drawings

4. The replacement drawings were received on 6 April 2005. These drawings are acceptable.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. The prior 101 rejection made against claims 7-13 has been deemed moot by the cancellation of claims 7-13 by the applicant.
7. Claims 31-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
8. Claims 31-36 are directed towards a machine-readable set of instructions, *per se*, because they are being claimed without embodiment on a computer readable medium for execution by a computer processor, are considered to be directed merely towards "functional descriptive material", which by itself is not statutory subject matter.

Examiner's note: these claims can be amended to become statutory under 35 U.S.C. 101, for one example, by modifying the claims to reflect embodiment of the claimed machine-readable set of instructions on a computer readable medium for execution to accomplish the computer program method steps of the claims, i.e., an article of manufacture.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1, 3, 4, 5, 14, 16-18, 20-24, 26-31, 33, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff et al. (U.S. 6,366,970), hereinafter referred to as Wolff, in view of Baumeister et al. (U.S. 2001/0034786), hereinafter

referred to as Baumeister, and Bommaiah et al. (U.S. 6,708,213), hereinafter referred to as Bommaiah.

12. Regarding claims 1 and 31, Wolff discloses a computer system having a memory for providing streaming media in one of a plurality of streaming media protocols, the computer system comprising:

a first plurality of interfaces configured to initiate reading of packet meta-data and packets of payload data from a memory (col. 3, lines 55-60). The data block object that Wolff refers to includes meta-data and the actual data (col. 4, lines 31-35).

a second plurality of interfaces configured to output streaming media packets to a client system at a request pace (col. 4, lines 5-10). The ability to set bit-rate in a streaming media client is common in the art. The examiner takes official notice that setting bit-rate in a streaming media client is well known in the art. Thus, given such knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of streaming the media packets to a client at a requested pace in order to prevent buffer over-run or under-run and to prevent loss of packets/data, because each client may differ in the amount of bandwidth that it can utilize.

Wherein the streaming media packets comprise the packet meta-data and the packets of payload data (Wolff, col. 4, lines 31-35).

Wolff does not explicitly disclose the packet meta-data and the packets of payload data being determined in response to a streaming media protocol requested by the client system. However, Baumeister teaches a method and system for streaming

media data in a heterogeneous network environment where a stream server portal generates the streaming meta-data and payload data of the requested protocol and streams it to the client (page 2, [0017]; page 2, 2nd column, first 3 lines lists the different streaming media products; page 2, [0032-0035] describes the selection and streaming process; Fig. 4a, items 10,20, and 30). Providing support for multiple, proprietary streaming media format alleviates compatibility problems. It also affords the users with greater flexibility in choosing the streaming media format best suited for their needs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Wolff with the teaching of Baumeister to include the determination of packet meta-data and payload data for the explicit reasons discussed herein above.

The combined teaching of Wolff and Baumeister teach substantial features of the claimed invention (discussed above), but fail to teach that the packet meta-data and the packets of payload data are read from the memory at a pace independent of the requested pace for the streaming media packets. However, Bommaiah teaches a method and apparatus for enhancing existing caching systems to better support streaming media over the Internet and other public network systems, where two processes are started concurrently to service the request for a streaming media. The first process streams the data from the helper server to the client as fast as the bandwidth allows (col. 8, lines 51-54), and the second process loads data to the helper server from its local disk, or another helper server, or the content server (col. 8, lines 58-60) as fast as the bandwidth between the helper server and these sources allows

(col. 8, lines 61-65). It can be seen that the rate at which the data is streamed to the client is independent of the rate at which data is read from the memory. The bandwidth between the client and the streaming server is often less than the bandwidth between a server and its local disk or other content servers. The requested bit-rate is only relevant from the streaming server to the client, and there is no need to boggle down the IO subsystem at the back-end, which is often the bottleneck in most applications. For example, there may be a mutual exclusion lock to a portion of a file during IO operations, and holding onto a lock for an extended period of time may be detrimental to a system's performance when different processes may be competing for the same resources. Even if the locks are released and re-locked, there is overhead associated with it that may also hinder the performance. Thus, reading the file at a pace slower than its maximum bandwidth may be counter-productive. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combined teaching of Wolff and Baumeister with the teaching of Bommaiah for the explicit reasons discussed herein above.

Regarding the limitation "wherein the second plurality of interfaces supports more than one streaming media protocol, Wolff does not explicitly disclose the packet meta-data and the packets of payload data being determined in response to a streaming media protocol requested by the client system. However, Baumeister teaches a method and system for streaming media data in a heterogeneous network environment where a stream server portal generates the streaming meta-data and payload data of the requested protocol and streams it to the client and the interfaces supporting more than

one streaming media protocol (page 2, [0017]; page 2, 2nd column, first 3 lines lists the different streaming media products; page 2, [0032-0035] describes the selection and streaming process; Fig. 4a, items 10,20, and 30). Providing support for multiple, proprietary streaming media format alleviates compatibility problems. It also affords the users with greater flexibility in choosing the streaming media format best suited for their needs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Wolff with the teaching of Baumeister to include the determination of packet meta-data and payload data for the explicit reasons discussed herein above.

13. Regarding claims 3 and 36, Wolff shows substantial features of the claimed invention as explained in the rejection of claim 1, but fails to disclose that the streaming media protocol is selected from the group: Microsoft Media Streaming, Real Time Streaming protocol, RealNetworks RealSystem. However, Baumeister teaches a method and system for streaming media where the streaming may be chosen from MicrosoftNetshowServer (Microsoft Media Streaming) and RealNetworksServer (RealNetworks RealSystem), and Real Time Streaming protocol (see page 2, 2nd column, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teaching of Wolff with the teaching of Baumeister to support these streaming media protocols, because they are commonly used protocols in the computer networking arts and because supporting multiple protocols alleviates the problems of compatibility and affords the users greater flexibility in choosing the streaming media format best suited for their needs.

14. Regarding claim 4, Wolff discloses the invention substantially as explained in the rejection of claim 1, but does not explicitly disclose that the second plurality of interfaces is configured to output a streaming media packet at a requested time. However, the examiner takes official notice that fast forwarding or rewinding the streaming media to a specific point in time is well known in the art. The ability to rewind or fast forward is a de facto feature in virtually all forms of media playback. Random access of data saves time by allowing the user to choose a specific point in time of playback in a given media without having to sequentially play an entire media at the normal rate. The advantages of random access are well known in the art. For example, sequential search for an item in an array is much slower than random access into an array with a use of an index. Fast forwarding or rewinding in media playback is a natural extension of sequential file access and random file access in normal files on computer readable medium. In fact, it is true that a media file is also a normal file, readable by a computer, and thus randomly accessible. Given such knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Wolff by employing the well-known feature of playing the media stream from a certain point in time. Thus, it would have been obvious to one of ordinary skill in the art to modify the teaching of Wolff to include this feature for the explicit reasons discussed herein above.

15. Regarding claim 5, in accordance with claim 1, Wolff discloses a computer system wherein the second plurality of interfaces outputs streaming media packets to the client system after packet meta-data and packets of payload data are read from the

memory (col. 4, lines 5-12). It is understood that when data is read from the disk, it is subsequently read into memory.

16. Claim 14 is rejected under the same rationale as claim 1.
17. Regarding claim 16, Wolff, Bommaiah, and Baumeister show substantial features of the claimed invention, as discussed above, but fail to explicitly disclose that retrieving the second data object comprises initiating retrieval of the second data object from the disk memory after a threshold number of media packets from the first stream of media packets have been sent to the client. However, claim 16 describes a commonly known technique in the art known as buffering. Bommaiah discloses a playout buffer and states that the use of a playout buffer is well known in the art (col. 8, lines 12-15). The playout buffer is filled before the client starts processing the information contained in it. Before the buffer is completely empty (threshold), it is filled again. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teaching of Wolff and Baumeister with the teaching disclosed by Bommaiah to include the use of buffering to absorb jitter, because data can be filled faster to the buffer than can be streamed to the client (Bommaiah, col. 8, lines 14-19).
18. Regarding claim 17, Wolff, Bommaiah, and Baumeister show features of the claimed invention, as discussed herein above, including the initiation of the retrieval of the second data object from the disk memory, which comprises of requesting a stream of media packets from an upstream server (Bommaiah, col. 7, line 67 – where content server is disclosed). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the teaching of Bommaiah in the combined

teaching of Wolff, Bommaiah, and Baumeister, as discussed above, in order to prevent data under-run.

19. Regarding claim 18, Wolff, Bommaiah, and Baumeister show feature of the claimed invention, as discussed above, including the initiation of retrieval of the second data object from the disk memory, which further comprises of receiving the stream of media packets and storing the stream of media packets as the second data object in the disk memory (Bommaiah, col. 6, lines 44-47 teaches of the content server streaming the media to the HS; col. 6, lines 52-53 teaches that the media is stored on memory or disk). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the teaching of Bommaiah the combined teaching of Wolff, Bommaiah and Baumeister, as discussed above, in order to prevent the loss of data.

20. Claim 20 is rejected under the same rationale as claim 4, including claim 20 recitation of the limitation waiting until the second data object is retrieved from the disk memory. It is understood that data must first be retrieved from the disk memory before it can be sent to the client (else there is nothing to send).

21. Claim 21 is rejected under the same rationale as claim 1.

22. Regarding claim 22, Wolff, Bommaiah, and Baumeister disclose an apparatus wherein the first portion is also configured to direct storage of the first plurality of media data into a local memory after the first plurality of media data are retrieved from the disk memory (Wolff, col. 3, lines 55-59 – it is understood that data is subsequently read into memory after it has been read from disk), and wherein the second portion is also

configured to retrieve at least a subset of the first plurality of media data from the local memory (Wolff, col. 4, lines 5-10).

23. Regarding claim 23, Wolff, Bommaiah, and Baumeister show substantial features of the claimed invention but fail to explicitly disclose that the first portion is also configured to determine whether the second plurality of media data are stored in the disk memory. Nonetheless, the examiner takes official notice that it is obvious to check for the existence of data. A streaming media necessarily checks for the existence of data, else it would send non-existent data. Even if it is the case that the device overwrites the existing data without checking for existence, doing so would be counter productive because it would mean extra IO (the bottleneck in a computer system) must be performed. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the feature discussed in claim 23 for the explicit reasons discussed herein above.

24. Regarding claim 24, Wolff, Bommaiah, and Baumeister show substantial features of the claimed invention but fail to explicitly disclose that there is a third portion coupled to the first portion that is configured to request a second media data stream from an upstream streaming apparatus, and configured to receive the second media data stream; wherein the first portion is also configured to direct storage of the second plurality of media data in the disk memory, wherein the second plurality of media data are determined in response to the second media data stream; and wherein the third portion request the second media data stream from the upstream streaming apparatus when the first portion initially determines that the second plurality of media data are not

stored in the disk memory. However, the examiner takes official notice that the practice of "divide and conquer" is old and well known in the art. The use of separate modules, subroutines, threads, devices, etc. to handle specialized functionality reduces complexity, increases reusability, interoperability, and efficiency and responsiveness. The limitations recited and set forth in claim 24 have all been addressed in previous claims (see claim 1 and 23). Claim 24 merely separates these functionalities into a separate device. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the feature discussed in claim 24 for the explicit reasons discussed herein above.

25. Regarding claim 26, Wolff, Baumeister, and Bommaiah disclose an apparatus of claim 24 but fails to explicitly teach that the third portion comprises at least of a portion of a streaming media client selected from the group: Microsoft Media Player, RealNetworks RealPlayer, Apple QuickTime. However, Bommaiah teaches of a streaming media device wherein the client may be selected from group: Microsoft Media Player, RealNetworks RealPlayer, Apple QuickTime (Bommaiah, page 2, 2nd column, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teaching of Wolff and Bommaiah with the teaching of Baumeister to support these streaming media clients, because supporting multiple protocols alleviate the problems of compatibility and affords the users with greater flexibility in choosing the steaming media format best suited for their needs.

26. Claim 27 is rejected under the same rationale as claim 26.

27. Claim 28 is rejected under the same rationale as claim 24. The process is being repeated asynchronously. First device attempts to get the data from its disk, and if it fails, another device fetches the data from the upstream server. This process is being executed asynchronously as yet another device is streaming the fetched data to the client. Thus, the limitation recited in claim 28 is merely disclosing this cyclic process.

28. Regarding claim 29, Wolff disclose an apparatus wherein the second portion begins output of the first media data stream only after the first plurality of media data are stored in the disk memory (col. 4, lines 5-10).

29. Regarding claim 30, Wolff, Baumeister, and Bommaiah disclose an apparatus of claim 28 but fail to explicitly disclose that the second portion being output of the first media data stream before the first plurality of media data are stored on the disk memory. However, Bommaiah discloses that the HS can serve a client's request from any combination of sources including: the memory ring buffer, cache on disk, the memory or disk of other HSs in the network, and the content server (col. 7, lines 64-67). Thus, the data does not necessarily have to be written to disk before it is streamed. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include further combine the teaching of Wolf, Baumeister, and Bommaiah with the teaching discussed above because avoiding disk IO reduces latency and increases performance.

30. Claims 33 and 35 contain similar subject matter and are rejected under the same rationale as claim 5.

31. Claims 2, 15, 25, 32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff, Baumeister, and Bommaiah as applied to claims 1, 3, 4, 5, 14, 16-18, 20-24, 26-30 above, and further in view of Jones et al. (U.S. 6,744,763), hereinafter referred to as Jones.

32. Regarding claim 2, Wolff, Baumeister, and Bommaiah show substantial features of the claimed invention but fail to disclose a third plurality of interfaces configured to receive the packet meta-data, configured to adjust the packet meta-data to form adjusted packet meta-data, and to output the adjusted packet meta-data; wherein the streaming media packets are also determined in response to the adjusted packet meta-data. Baumeister discloses a method and system for streaming media data in a heterogeneous network environment where the system is configured to receive the meta-data and to output the meta-data (col. 3, [0048], lines 5-8). Baumeister also discloses that the streaming media packets are determined in response to the packet meta-data (col. 3, [0048], lines 11-15 – the meta-data is generated then sent to the media player via the stream server portal. Upon receiving the meta-data, the media player invokes the stream server using information of the streaming meta-data. Thus, the media packets are determined by the meta-data). However, Baumeister teaches of a generated meta-data, but does not specifically teach an adjusted meta-data. Jones discloses a method and apparatus for media data transmission and teaches a QuickTime file format, where the meta-data provides declarative, structural and temporal information about the actual media data. Jones goes on to further disclose that the QuickTime file format is well suited for situations where meta-data is modified

and temporal mapping information is adjusted (col. 1, lines 65-67; col. 2, lines 1-5). If a meta-data can be created, being able to modify, update, or adjust it is a logical and obvious extension. Furthermore, having an ability to adjust meta-data increases interoperability between streaming media protocols. Hence, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teaching of Baumeister with the teaching of Jones to include the adjusting of meta-data (i.e. temporal mapping of meta-data which indexes into a specific time range of the media).

33. Claim 15 is rejected under the same rationale as claim 2.

Claim 25 is rejected under the same rationale as claim 2, except that the claim recites the limitation of there being a fourth portion, and a second portion configured to retrieve at least a portion of the first plurality of media data and configured to combine the first plurality of re-timed media data and the portion of the first plurality of media data to form the first media data. Nonetheless, the examiner takes official notice that the practice of "divide and conquer" is old and well known in the art. The use of separate modules, subroutines, threads, devices, etc. to handle specialized functionality reduces complexity, increases reusability, interoperability, and efficiency and responsiveness. Wolff discloses a processing thread which takes data blocks from the input queue and processes the block by parsing and/or modifying the data as necessary to prepare the data block for output (Wolff, col. 3, lines 61-65). Claim 2 above states that the third portion re-times and adjusts the media data. However, it would be obvious to have the second portion combine (when it is sent to the client, the two portions are necessarily

combined) the re-timed, adjusted meta-data with the payload data instead, which would be a slight variation of claim 2, but nonetheless, obvious (a modularized, multi-threaded system affords great deal of flexibility in processing in terms of spatial locality [what is processed where], and temporal locality [when it is processed] depending on the needs of the system). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to further modify the teaching of Wolff, Baumeister, and Bommaiah to include the features re-timing of media data taught by Jones implemented in the fourth portion with the second portion combining the re-timed media data and the first plurality of media data to form the first media data stream for the explicit reasons discussed herein above.

34. Claims 6 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff, Baumeister, and Bommaiah as applied to claims 1, 3-5, 14, 16-18, 20-24, and 26-30 above, and further in view of Loguinov (U.S. 2002/0181506).

35. Regarding claims 6 and 19, as stated in claim 3 above, the combined teaching of Wolff, Baumeister, and Bommaiah teach substantial features of the claimed invention, including a system for streaming media packets, where a specific streaming media protocol is selected, but it fails to explicitly disclose that the sizes of streaming media packets output to the client system depend upon the streaming media protocol. However, Loguinov teaches a method and system for supporting real-time packetization of multimedia information where depending on the specific protocol in use, a packet may be fixed or variable length (page 2, [0020], lines 7-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to

further modify the teaching of Wolff, Baumeister, and Bommaiah to employ use of different packet sizes of streaming media packets depending upon the streaming media protocol because certain streaming media protocol may be better suited for certain packet sizes (certain protocol may require fixed length while others require variable length of differing length, for example).

36. Claims 32 and 34 contain similar subject matter and are rejected under the same rationale as claim 2.

Response to Arguments

37. Applicant's arguments filed 6 April 2005 have been fully considered but they are not persuasive.

38. (A) Applicant argues: "...neither Wolff, Baumeister, Bommaiah, Jones, nor Loguinov disclose or suggest a computer system with a plurality of interfaces configured to output streaming media packets determined in response to a streaming media protocol requested by a client system."

39. As to point (A), the examiner disagrees. In reference to the rejection to claim 1, Wolff discloses a computer system having a memory for providing streaming media in one of a plurality of streaming media protocols, the computer system comprising:

a first plurality of interfaces configured to initiate reading of packet meta-data and packets of payload data from a memory (col. 3, lines 55-60). The data block object that Wolff refers to includes meta-data and the actual data (col. 4, lines 31-35).

a second plurality of interfaces configured to output streaming media packets to a client system at a request pace (col. 4, lines 5-10). The ability to set bit-rate in a

streaming media client is common in the art. The examiner takes official notice that setting bit-rate in a streaming media client is well known in the art. Thus, given such knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of streaming the media packets to a client at a requested pace in order to prevent buffer over-run or under-run and to prevent loss of packets/data, because each client may differ in the amount of bandwidth that it can utilize. This is deemed a computer system with a plurality of interfaces configured to output streaming media packets determined in response to a streaming media protocol requested by a client system.

40. (B) Applicant argues: "...Baumeister does not disclose or suggest that any one Stream Server is capable of streaming media data of more than one type (i.e., using more than one streaming media protocol)."

41. As to point (B): In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies while arguing claim 1 (i.e., "one Stream Server is capable of streaming media data of more than one type (i.e., using more than one streaming media protocol).") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

42. (C) Applicant argues: "...Baumeister does not disclose or suggest that two Stream Servers capable of streaming media data of different types are hosted on the same server computer."

43. As to point (C): In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies while arguing claim 1 (i.e., "two Stream Servers capable of streaming media data of different types are hosted on the same server computer.") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

44. (D) Applicant argues: "...none of the references cited by the Examiner, including Baumeister, disclose or suggest a computer system with a plurality of interfaces that support more than one streaming media protocol by outputting streaming media packets determined in response to a streaming media protocol requested by a client system..."

As to point (D), in reference to point (A) and the rejection made above to claim 1, Wolff does not explicitly disclose the packet meta-data and the packets of payload data being determined in response to a streaming media protocol requested by the client system. However, Baumeister teaches a method and system for streaming media data in a heterogeneous network environment where a stream server portal generates the streaming meta-data and payload data of the requested protocol and streams it to the client (page 2, [0017]; page 2, 2nd column, first 3 lines lists the different streaming media products; page 2, [0032-0035] describes the selection and streaming process; Fig. 4a, items 10,20, and 30). Providing support for multiple, proprietary streaming media format alleviates compatibility problems. It also affords the users with greater flexibility in choosing the streaming media format best suited for their needs. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Wolff with the teaching of Baumeister to include the determination of packet meta-data and payload data for the explicit reasons discussed herein above.

45. (E) Applicant argues: "... Baumeister does not disclose or suggest a single computer system capable of supporting multiple streaming media protocols."

46. As to point (E), examiner disagrees. Baumeister clearly discloses the ability for a computer system to support multiple streaming media protocols on page 2, col. 1-2, paragraph 27-28. The ability to be able to support a plurality of media protocols like RealNetworksServer and MicrosoftNetshowServer is just an example of being able to support multiple streaming media protocols.

47. (F) Applicant argues: "... Wolff does not disclose or suggest writing or reading data to/from a disk..."

48. As to point (F), the examiner disagrees. Wolff clearly discloses the ability to read and write from memory in column 2, lines 10-20. The ability to read and write to disk is a necessary step in any computer system and is very well known in the art. Wolff discloses the ability to read and write to a disk by completing the technique using memory copying in a CPU system.

Conclusion

49. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Ailes whose telephone number is (571)272-3899. The examiner can normally be reached Monday through Friday, 7:30-5, First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BAA


ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER